Contracts to Be Let

Bids received until May 11, 1915.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS,
Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m., Tuesday, the 11th day of May, 1915, for the repair of highways in the following counties:

Cattaraugus & Chautauqua (one contract—surface application 33.38 miles); Cayuga (one contract—surface treatment, 11.24 miles); Cortland County (one contract—surface treatment, 11.22 miles); Dutchess (two contracts—surface treatment, 23.95 miles); Erie (one contract—surface treatment, 22.79 miles); Lewis (one contract—surface treatment, 15.77 miles); Ontario & Livingston (one contract—surface treatment, 22.33 miles); Monroe (two contracts—surface treatment, 41.41 miles); Niagara (two contracts—surface treatment, 52.57 miles); Ontario (one contract—surface treatment, 18.42 miles); Orleans (one contract—surface treatment, 20.54 miles); Onondaga (one contract—surface treatment, 14.91 miles); Rensselaer (one contract—surface treatment, 4.14 miles); Suffolk (one contract—surface treatment, 7.54 miles); Tompkins (one contract—surface treatment, 4.49 miles); Westchester (one contract—surface treatment, 25.01 miles).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the contracts are to be repaired. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "Information for Bidders" in the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

⁂

Bids received until May 3, 1915.

Notice to Bridge and Concrete Contractors

Hamlin, West Va.

Sealed bids will be received until 2 o'clock P.M. May 3, 1915, by the Commissioners of the Lincoln County Court of Lincoln County, West Va., at Hamlin, West Va., the County Seat of said County, and at the County Clerk's Office,

FOR THE CONSTRUCTION OF A STEEL BRIDGE ACROSS GUYANDOTTE RIVER AND THE CONCRETE WORK FOR SAME.

For plans and specifications, address Oliver & Maupin, Engineers, Huntington, West Va.

The said Commissioners reserve the right to reject any and all bids.

A. C. PARSONS, President.
By ALBERT F. BLACK, Clerk.
Lincoln County Court.

⁂

Bids received until May 18, 1915.

Public Wharf

City of Dunkirk, New York, April 17, 1915.

Sealed proposals for construction of a public wharf at Dunkirk, N. Y., will be received until 8 P.M., Eastern time, May 18th, 1915, and then opened publicly. Right is reserved to reject any or all bids. Plans and specifications are on file and information may be had on application to the undersigned. Specifications will be forwarded to applicants. To insure return of plans, a deposit of $20 is required for plans mailed, which sum will be returned to applicant upon receipt of plans.

A. D. TOOMEY, City Clerk.

Bids received until May 6, 1915.

Reservoir

Gilbertsville, N. Y.

Sealed proposals for the construction of a storage reservoir and appurtenances for the village of Gilbertsville, N. Y., will be received the 6th day of May, 1915, at the office of the Board of Trustees of such village, until 2 o'clock P.M. of that day, at which time and place all proposals will be opened and read.

Each proposal shall be accompanied by a certified check or New York draft in the sum of $1,000.00, and the successful contractor will be required to give a satisfactory bond in the penalty of 50 per cent. of the amount of the bid.

Copies of the specifications and proposal forms may be had upon application to the Engineer or Clerk of the Board of Trustees.

A set of plans may be had upon application to the Engineer and the deposit of $5.00, which deposit will be returned upon the receipt of the plans in good order within two weeks after the date of the letting.

The Board of Trustees reserves the right to reject any or all bids.

The principal items of work are:

7650 cu.yds. earth excavation.
3900 cu.yds. embankment.
650 cu.yds. concrete.
420 cu.yds. filter sand and gravel.

The deposit of the successful bidder will be retained by and forfeited to the village of Gilbertsville, in case such bidder shall refuse to enter into a contract and file a bond in accordance with his proposal within ten days after such proposal is accepted.

JOHN HANKEY, President.
CHARLES E. PERRY, Consulting Engineer,
102 Hudson Ave., Albany, N. Y.

⁂

Bids received until May 14, 1915.

Sewage Collecting System and Sewage Treatment Works

Huntington, Long Island, N. Y.

Sealed proposals for furnishing all labor and materials for constructing a system of sewers and a sewage disposal works in the Sewer District of Huntington, N. Y., addressed to the Sewer Commissioners of the Sewer District of Huntington, N. Y., and endorsed "Proposal for Constructing Sewers and Sewage Disposal Works," will be received by the Sewer Commissioners at their office in the Town Hall, Huntington, N. Y., until 2 o'clock P.M. on May 14, 1915.

The proposed sewer system consists of some 15 miles of sewers, ranging in size from 8 to 15 inches in diameter and for the most part of vitrified pipe with bituminous joints. The sewage treatment works consists of settling tanks of the Imhoff type, divided into three sections, each about 50 feet long and 11.5 feet wide, with suitable sludge compartments and sludge-drying beds, and other appurtenances, including a centrifugal pump operated by a gasoline engine.

Proposals must be made on the blank form of proposal bound with the contract and specifications. Plans and specifications may be obtained from George W. Fuller, Engineer, 170 Broadway, New York City, or C. M. Felt, Secretary, Sewer Commissioners, Huntington, N. Y., upon depositing $25, which will be refunded if said plans and specifications are returned in good condition within thirty days after bids have been received and acted upon by the said Sewer Commissioners.

Proposals must be accompanied by a certified check on a national bank drawn to the order of the Sewer Commissioners of Huntington, N. Y., in the sum of $3,000. The bidder to whom the contract is awarded will be required to execute the same and furnish a surety bond in the sum of 50 per cent. of the amount of the contract within ten days, Sundays excepted, after receiving final notice of the award. The bond shall be satisfactory to the Sewer Commissioners both as to form and surety. The Sewer Commissioners reserve the right to reject any and all bids.

C. M. FELT, Secretary.

Bids received until May 11, 1915.

Sewers and Disposal Plant

Palisades Park, N. J.

SEALED PROPOSALS will be received by the Mayor and Council of the Borough of Palisades Park, N. J., at the Borough Hall, on Tuesday, May 11th, 1915, at 8 o'clock P.M., for the construction of a Sedimentation tank of the Imhoff type, Sludge drying beds and all other appurtenances, also, for a system of sewers, consisting of

about 1430 ft. 20 inch Pipe sewer.
" 4380 " 15 " " "
" 1450 " 12 " " "
" 4940 " 10 " " "
" 28390 " 8 " " "
" 150 Manholes,

and siphon under tracks of Northern Railroad, etc.

Plans and specifications can be seen at the office of Lemuel Lozier, Borough Engineer, Central Boulevard and Broad Avenue, Palisades Park, N. J.

Prospective bidders can obtain a copy of the plans and specifications for a deposit of Ten ($10.00) Dollars, which deposit will be refunded upon the return of the plans and specifications in good condition.

All proposals must be made upon the forms furnished and in full conformity with all the requirements and conditions expressed therein.

The work will be divided into two sections, "A," including the sewers, manholes, etc., "B," including the sedimentation tank, drying beds, etc.

Bidders are invited to offer proposals either for Section "A" or Section "B" or for both Section "A" and "B."

A certified check drawn to the order of the Mayor and Council of the Borough of Palisades Park in the sum of Five Thousand Dollars ($5000.00) must accompany each proposal for Section "A," in the sum of Two Thousand ($2000.00) Dollars for Section "B," or in the sum of Seven Thousand ($7000.00) Dollars for both Sections "A" and "B" as surety that contract will be entered into if proposal is accepted.

A Surety Company bond equal to the amount of the contract will be required in each contract.

Bidders are particularly notified that no bids will be received after the time named above, 8 o'clock P.M., May 11th, under any circumstance.

The Mayor and Council of Palisades Park reserve the right to reject any or all bids.

BENJAMIN E. BUDDS, Mayor.
GEORGE F. WILSON,
Chairman Sewer Committee.
EDGAR R. DAVIS, Borough Clerk.

Bids received until May 5, 1915.

Steam Turbine-Driven Centrifugal Pump

Kansas City, Mo.

SEALED PROPOSALS will be received by the Purchasing Agent of Kansas City, Missouri, at the office of the Purchasing Agent, Second Floor, City Hall, until two o'clock p.m. of Wednesday, May 5th, 1915, for the designing, construction, delivery and erection of a steam turbine, reduction gear, centrifugal pumping unit of a capacity to pump continuously twenty (20) million U. S. gallons of water per twenty-four (24) hours, against a total combined head of three hundred and sixty (360) feet and steam pressure of one hundred and sixty-five (165) pounds per square inch at throttle; together with all machinery, tools and appurtenances necessary; all in accordance with the plans and general specifications on file in the office of the Chief Engineer of the Water Department.

Each bidder shall deposit with the City Comptroller a certified check in the amount of Seven Hundred and Fifty Dollars ($750.00), payable to the City Comptroller of Kansas City, Missouri, and accompany his bid with the Comptroller's receipt therefor.

The certified check referred to in the Advertisement shall be submitted by each bidder as a guaranty that the bidder will, within ten (10) days after receiving the award of a contract, file with the City a satisfactory bond to the amount of Twenty-five Thousand Dollars ($25,000.00) and will execute the contract.

The Board of Fire and Water Commissioners does not bind itself to accept the lowest or any bid offered, and reserves the right to reject any and all bids and to waive any informality when it seems to be to the interest of Kansas City, Missouri, to do so.

J. P. LANGAN, Purchasing Agent.
BURTON LOWTHER, Chief Engineer.

Bids received until May 17, 1915.

Contract 8—Nepaug Reservoir

Hartford, Conn.

Sealed proposals, addressed to the Board of Water Commissioners of the City of Hartford, for the construction of a new gravel surface road north of Nepaug Reservoir in the Town of New Hartford, Conn., will be received at the office of the Board, City Hall, Hartford, until 3:00 p.m., Monday, May 17, 1915.

Contract 8 comprises the construction of a gravel road about 1½ miles long through new country. The road will have a travel path 14 feet wide with 8 inches of gravel surfacing, together with the necessary culverts and guard fences.

Plans and specifications may be obtained at the office of the Chief Engineer, Pilgard Building, Hartford, Conn., on deposit of $5.00, which amount will be refunded if the plans and specifications are returned in good order before June 17, 1915. Specifications used in making a bid will be considered as returned.

A certified check or cashier's check for $2,000 must accompany each bid and the successful bidder will be required to furnish bonds in the sum of $20,000. The right is reserved to reject any and all bids.

It is expected to let contracts in the near future for the following work, which is in the immediate vicinity of this location and which may be looked over by prospective bidders at the same time that the road work on Contract 8 is examined:

Contract 9—East Dike. Contract probably will be advertised about June 1st and calls for the construction of an earth dam about 25 feet high and 600 feet long, containing about 28,000 cubic yards of earth embankment and 1,500 cubic yards of masonry core wall.

Contract 10—Richards Corner Dam. Contract probably will be advertised about June 15th and calls for the construction of an earth dam 70 feet high and 800 feet long, containing about 250,000 cubic yards of soil and gravel filling, 13,000 cubic yards of masonry core wall, 10,000 cubic yards of rock excavation and a concrete conduit and stream control for a drainage area of 62 square miles.

Later in the year a contract will be let for clearing the entire Nepaug Reservoir area of about 900 acres and grubbing about 125 acres of shore line.

BOARD OF WATER COMMISSIONERS,
WALTER S. GARDE, President.
FRED D. BERRY, Secretary.
CALEB MILLS SAVILLE, Chief Engineer.

Bids received until May 11, 1915.

To Paving Contractors

Anderson, S. C., April 24, 1915.

Sealed proposals on blank forms furnished by the City and addressed to the Board of Paving Commissioners will be received until Noon, May 11, 1915, for furnishing all material, labor, etc., for street paving.

The work will consist of approximately seventy-five thousand (75,000) square yards of street paving, including all classes.

Each bid must be accompanied by a certified check, made payable to the City Clerk and Treasurer, for five (5%) per cent. of price bid.

The right is reserved by the Board of Paving Commissioners to reject any, or all, or any portion of bids.

Specifications can be had and additional information gotten at the office of the City Engineer, Anderson, S. C.

W. A. SANDERS, City Engineer.
J. H. GODFREY, Mayor.

Bids received until May 10, 1915.

Seawall

Bridgeport, Conn., April 26, 1915.

Sealed proposals will be received by the Board of Park Commissioners until 1:00 P.M., May 10, 1915, at room No. 706 Security Building, for the construction of approximately 450 feet of seawall. Plans and specifications can be obtained from A. H. Terry, City Engineer. A deposit of $2.00 will be required to cover cost of drawings and prints. The right to reject any and all bids is reserved.

B. F. COONEY, Clerk,
Board of Park Commissioners.

Bids received until May 14, 1915.

Intercepting Sewers and Connections

OFFICIAL NOTICE NO. 10

Published by authority of the Sewerage Commission of the City of Milwaukee.

Milwaukee, Apr. 23rd, 1915.

Sealed proposals for constructing intercepting sewers and connections on both sides of the Milwaukee River in the City of Milwaukee will be received by the Sewerage Commission at its office in the City Hall, until 2:00 P.M. on the 14th day of May, A.D. 1915, at which place and time the proposals will be publicly opened and read.

The work to be done may be divided into two separate contracts numbered 9 and 10, or further sub-divided into five contracts numbered 11, 12, 13, 14 and 15.

Number 9 embraces the construction of an intercepting sewer and branches on the east side of Milwaukee River from a point below the dam to the intersection of Broadway and Detroit Streets, and requires the construction of approximately:

7927 feet brick and concrete sewer in open cut from 30″ to 51″ diameter.
3992 feet brick and concrete sewer in tunnel from 30″ to 51″ diameter.
3844 feet terra cotta pipe sewer from 10″ to 24″ diameter.
1762 feet of manholes and pile and timber foundations.

Number 9 may be sub-divided into three contracts numbered 11, 12 and 13.

Number 10 embraces the construction of an intercepting sewer and branches on the west side of Milwaukee River from the Holton Street Viaduct to the intersection of West Water and Fowler Streets, and requires the construction of approximately:

8480 feet brick and concrete sewer in open cut from 30″ to 48″ diameter.
2340 feet terra cotta pipe sewer in open cut from 10″ to 18″ diameter.
1105 feet of manholes and pile and timber foundations.

Number 10 may be sub-divided into two contracts numbered 14 and 15.

All as shown upon the plans and described in the specifications now on file in the office of the Sewerage Commission.

The time allowed for completing contract No. 9 or 10 shall be two hundred and fifty (250) working days. The time for completing either contracts No. 11, 12, 13, 14 and 15 shall be two hundred (200) working days. (Working days meaning such as are particularly described in the contract.)

The liquidated damages for not completing the work within the time agreed shall, for each day's delay, be an amount equal to one-half of one percentum of the aggregate cost of the work embraced in the contract.

Each proposal must be accompanied by a cash deposit of, or, in lieu thereof, by a certified check drawn upon a national or state bank doing business in the City of Milwaukee, to the order of the "Sewerage Commission of the City of Milwaukee," for the following sums; failing in which the bid will be rejected:

For proposal Number 9.....	$38,500.00
For proposal Number 10.....	25,000.00
For proposal Number 11.....	10,200.00
For proposal Number 12.....	13,000.00
For proposal Number 13.....	15,300.00
For proposal Number 14.....	11,400.00
For proposal Number 15.....	13,600.00

Specifications and blank forms of proposals can be obtained and detail plans examined, at the office of the Sewerage Commission in the City Hall.

The prices must be written in the proposal and also stated in figures. In case of variation the written prices will prevail.

All cash deposits or certified checks deposited by bidders to whom the contract is not awarded will be returned upon application to the Secretary of the Commission after the contract has been awarded or after the rejection of all bids. The cash deposit or certified check which may be deposited by the successful bidder will be returned to him as soon as the contract is properly executed and approved by the City Attorney and Sewerage Commission.

Full sets of detailed plans will be sent to any contractor desiring to bid upon receipt of ten dollars ($10.00). Said amount to be returned upon receipt of plans in good condition.

The Sewerage Commission of the City of Milwaukee reserves the right to reject any and all bids submitted.

J. H. FOWLES, Secretary.

Countersigned:

LOUIS M. KOTECKI, Comptroller.

⌘

U. S. ENGINEER OFFICE, Kansas City, Mo., April 24, 1915.—Sealed proposals for constructing about 5500 feet standard 3-row timber dike on Missouri River, about 92 and 98 miles below Kansas City, opposite and about 6 miles below Waverly, will be received at this office until 12 M., May 24, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

Bids received until May 7, 1915.

Trunk Sewers in Canal and Monroe and Clinton Streets, Concrete Retaining Walls and Curb Wall in Canal Street, and Curb Walls in Monroe Street

THE UNION STATION COMPANY.

Chicago, Illinois, April 23, 1915.

Sealed proposals, addressed as below stated, will be received by The Union Station Company, Chicago, Illinois, until 12 A.M., 7th day of May, 1915, for the construction of a reinforced concrete trunk sewer beginning at the Chicago River at a point immediately south of Washington Street, running thence west to Canal Street; thence south along Canal Street to Monroe Street; thence west on Monroe Street to Clinton Street; thence south in Clinton Street with a brick sewer to Adams Street; also a brick sewer in Canal Street from Randolph Street to Fulton Street and concrete sewer to the outlet in the Chicago River, with pipe sewer and brick sewer connections shown on plans; also a concrete retaining wall along the east curb line of Canal Street from Washington Street to Monroe Street and a concrete curb wall along the west side of Canal Street from Madison Street to Monroe Street, and concrete curb walls on both sides of Monroe Street from Clinton Street to Canal Street; according to the plans and specifications on file in the office of the Chief engineer of The Union Station Company, at No. 521 West Adams Street, Chicago, Illinois.

Proposals must be made out upon blanks furnished at said office and be addressed to the undersigned, endorsed "Proposal for Constructing Trunk Sewers and Concrete Retaining and Curb Walls," and be accompanied by a certified check for Ten Thousand Dollars ($10,000.00) on some responsible bank located and doing business in the City of Chicago, and made payable to the order of the Chief Engineer of The Union Station Company.

Bidders must deposit Ten Dollars ($10.00) for plans and specifications. The deposit will be returned upon return of plans.

No proposal will be considered unless the party offering it shall furnish evidence satisfactory to the Chief Engineer of The Union Station Company of his experience and his ability to perform the work in the time called for in the specifications; that he has the necessary facilities or adequate means to procure such facilities, together with sufficient pecuniary resources to fulfill the conditions of the contract and specifications, in case such contract should be awarded to him.

The above work is to be completed under the provisions of an ordinance passed March 23, 1914, and accepted by The Union Station Company, September 23, 1914.

Companies or firms bidding will give individual names, as well as the name of the firm and their address.

The Union Station Company reserves the right to reject any and all bids.

THOS. RODD, Chief Engineer,
The Union Station Company.

⌘

Bids received until May 4, 1915.

Water Tube Boilers at the Main Pumping Station

Toronto, Ontario.

Tenders will be received through registered post only up to noon on Tuesday, May 4th, 1915, for the supply and installation of Water Tube Boilers at the Main Pumping Station.

Tenders must be addressed to the Chairman, Board of Control, City Hall, Toronto, and be plainly marked on the outside of envelope as to contents.

Specifications and forms of tender may be obtained at the Works Department, City Hall.

Tenderers must comply strictly with conditions of City By-law as to deposits and sureties as set out in specifications and forms of tender. The lowest or any tender not necessarily accepted.

T. L. CHURCH (Mayor),
Chairman, Board of Control.

Toronto, April 21st, 1915.

⌘

U. S. ENGINEER OFFICE, Kansas City, Mo., April 24, 1915.—Sealed proposals for constructing about 1000 feet standard 3-row timber dike, and about 5000 feet standard revetment on Missouri River, about 98 miles below Kansas City, and 6 miles below Waverly, will be received at this office until 12 M., May 24, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

Bids received until May 21, 1915.

Bridges

Rome, Ga.

Sealed proposals will be received by the Board of Commissioners of Roads & Revenue, Floyd County, Ga., until twelve o'clock noon of May 21st, 1915, for the construction of the following bridges, with the City of Rome, said County.

(a) Second Avenue Bridge—A reinforced concrete arch bridge, forty foot roadway and two eight foot sidewalks, total length of about three hundred and seventy-six (376) ft.

(b) Reinforced concrete arch bridge at Broad Street, forty foot roadway and two eight foot sidewalks, total length of about four hundred and seven (407) feet.

(c) Steel truss bridge on concrete substructure, at Fifth Avenue, with a thirty-six and one-half foot roadway and two eight foot sidewalks, total length three hundred and sixty-seven (367) feet. This bridge will have a movable channel span with a channel clearance of about one hundred feet.

Certified check for One Thousand Dollars must accompany each bid.

Instructions to bidders, plans, specifications, forms of contracts, proposal and bond may be seen in the offices of the Consulting Engineers, Greiner & Whitman, Fidelity Building, Baltimore, Md., W. C. Spiker, Hurt Building, Atlanta, Ga., and in the office of Kieffer Lindsey, County Engineer, at Rome, Ga.

Contractors can obtain complete sets of plans, specifications, etc., from W. C. Spiker, for the sum of $5.00 per set for the Fifth Avenue Bridge and $5.00 per set for the Second Avenue and Broad Street bridges combined, and the Board reserves the right to reject any or all proposals and to make the award for either bridge separately or all bridges together, according to the best interest of the County.

After bidding on plans as above stated bidders may also submit alternate designs and specifications with their bids thereon, such alternate designs to be approved by the County Consulting Engineers. This April 19th, 1915.

J. G. POLLOCK, Commissioner.
C. L. CONN, Commissioner.
W. N. HORTON, Commissioner.
P. C. GRIFFIN, Commissioner.
C. M. YOUNG, Commissioner.
J. S. DAVIS, Commissioner.

Bids received until May 18, 1915.

Highway Work

OFFICE OF THE STATE COMMISSION OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m. Tuesday, the 18th day of May, 1915, for the repair of highways in the following counties:

Allegany (one contract—surface treatment, one contract—resurfacing); Cayuga (one contract—resurfacing); Franklin (one contract—surface treatment, one contract—resurfacing); Fulton (one contract—surface treatment); Genesee (one contract—surface treatment, one contract—broken stone); Livingston (three contracts—surface treatment, one contract—broken stone); Monroe (two contracts—surface treatment, four contracts—broken stone); Hamilton (one contract—surface treatment); Ontario (one contract—surface treatment, one contract—resurfacing, one contract—broken stone); Madison (two contracts—surface treatment); Montgomery (one contract (surface treatment); Oneida (three contracts—surface treatment); Otsego (one contract—surface treatment); Herkimer (one contract—surface treatment); Orange (two contracts—resurfacing); Orleans (one contract—surface treatment, one contract—broken stone); Oswego (two contracts—surface treatment; Rensselaer (one contract—resurfacing); Seneca (one contract—surface treatment); Steuben (one contract—resurfacing); Tompkins (one contract—resurfacing); Washington (one contract—resurfacing); Wyoming (one contract—surface treatment, one contract—broken stone); Yates (one contract—surface treatment).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the contracts are to be repaired. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is called to "Information for Bidders" in the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.
I. J. MORRIS, Secretary.

Bids received until May 25, 1915.

Brick, Segment Block and Terra Cotta Pipe Sewers

Wilkes-Barre, Pa.

SEALED PROPOSALS will be received at the City Clerk's Office, Wilkes-Barre, Pennsylvania, until Tuesday, May 25th, 1915, at 12 o'clock, Noon, for furnishing all labor and materials and constructing brick, segment block and terra cotta pipe sewers in the City of Wilkes-Barre in accordance with plans and specifications, copies of which may be had upon application to B. K. FINCH, City Engineer, upon payment to him of the sum of Five Dollars ($5), which will be refuned to bidders, provided said specifications are returned to the City Engineer on or before June 1, 1915. Proposals to be endorsed "Proposals for Sewer Construction" and addressed to Fred H. Gates, City Clerk, and must be accompanied by a certified bank check in the sum of One Thousand Dollars ($1,000), conditioned upon the successful bidder entering into a contract for the completion of said work. The firms who submit bids to those bidding on the sewer, to furnish to said bidders vitrified segment sewer tile, must file with the City Clerk, on or before May 25th, 1915, at 12 o'clock Noon, a Surety Company Bond in the sum of Ten Thousand Dollars ($10,000) guaranteeing said tile for a period of five years from the date of the completion of the sewer. The City Council reserves the right to reject any or all of the bids.

C. N. LOVELAND,
Superintendent of the Department of Streets and Public Improvements.

Bids received until May 18, 1915.

Water-works Improvement

Paris, Illinois.

Sealed proposals will be received by the City Clerk of Paris, Edgar County, Illinois, until 10 o'clock A.M., May 18, 1915, for the construction of four earth dams, a diversion channel, a wet well and an intake, and two sewers, at which time they will be publicly opened and read.

Bids will be received on four alternatives, one of which will be chosen. The work under the alternatives will consist of about:

Class of Work	Alternative A	Alternative B	Alternative C	Alternative D
Earth Excav. cu.yd.	55,000	8,000	53,000	4,600
Earth Fill cu.yd.	55,000	55,000	21,000	21,000
Rock Excav. cu.yd.	3,400	170	3,300	90
Concrete cu.yd.	2,500	5,400	1,600	3,500
15-in. pipe sewer linear feet	3,400	800	3,400	800

Copies of the contracts, plans and specifications and information for bidders are on file at the office of the City Clerk, Paris, Illinois, or they may be obtained by application to the engineers, Fleming, Babbitt and Enger, Urbana, Illinois.

A charge of fifteen dollars will be made for each set of plans, specifications, etc., which charge will be refunded upon the return of the complete set in good condition on or before June 18, 1915.

Bids received until May 3, 1915.

Notice to Bridge Contractors

Cobleskill, N. Y.

Sealed bids and proposals will be received by the undersigned at the office of the Town Clerk in the Village and Town of Cobleskill, Schoharie County, N. Y., until One o'clock in the afternoon of May 3rd, 1915, at which place and hour they will be publicly opened and read, for furnishing material in constructing a new bridge over the Cobleskill Creek near the residence of Foster Barner in said Village and Town.

Detailed plans and specifications of said bridge may be seen and examined at the office of the Town Clerk in said Village and Town, and at the State Highway Commission's Office at Albany, N. Y.

Each bid of proposal must be addressed to Ogden Eldredge, Town Clerk, Cobleskill, Schoharie County, N. Y.

The right to reject any and all bids is hereby reserved.

LORENZO J. GORDON,
Town Superintendent of Highways of the Town of Cobleskill, N. Y.
Dated April 9th, 1915.

Bids received until May 5, 1915.

Proposals for Lift Bridge

Elizabeth, N. J.

Sealed proposals will be received by the Committee of the Board of Chosen Freeholders of Union County at the Court House, Elizabeth, N. J., at 2:00 P.M. Wednesday, May 5, 1915, for the following described work.

New steel lift bridge over the Elizabeth river at Baltic Street and Trenton Avenue, Elizabeth, N. J. The channel clearance to be 60 feet and the length of moving leaf 85 feet. The width of roadway to be 24 feet and the width of each sidewalk 5 feet, the bridge to consist of a single leaf pony truss Strauss Trunnion Bascule Bridge as designed by the Strauss-Bascule Bridge Co. of 104 South Michigan Avenue, Chicago, Ill. Each bid to cover the entire bridge complete including foundations, superstructure, approaches, excavations and embankments, as set forth in the specifications.

Each bid must be accompanied with a certified check for $1,000.00 as a guarantee of good faith, as required by the specifications.

Plans and specifications for this work may be examined at the office of the County Engineer of Union County, 120 Broad Street; Elizabeth, N. J.

The right is reserved by the Committee to reject any or all bids as may be deemed best for the interests of the County of Union.

JACOB L. BAUER, County Engineer.

Bids received until May 5, 1915.

Highway Work.

OFFICE OF THE STATE COMMISSION OF HIGHWAYS,
Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at 1 o'clock p.m., Wednesday, May 5th, 1915, for the improvement of Highways in the following counties:

Allegany, 2 highways (4.00; 8.64); Cattaraugus (approx. length 4.43); Chautauqua, 2 highways (3.99; 1.59); Dutchess (approx. length .88); Franklin (approx. length 8.81); Hamilton (approx. length 5.01); Herkimer, 3 highways (1.81; 3.60; 5.63); Jefferson (approx. length 7.27); Livingston, 3 highways (3.51; 3.96; 2.18); St. Lawrence, 3 highways (5.66; 9.09; 10.85); Schenectady (approx. length 5.62); Schoharie (approx. length 4.99).

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and also at the office of the Division Engineers in whose division the road is to be constructed. The addresses of the Division Engineers and the counties in which they are in charge will be furnished on request.

The especial attention of bidders is caled to "INFORMATION FOR BIDDERS" in the itemized proposal, specifications and contract agreement.

EDWIN DUFFEY, Commissioner.

I. J. MORRIS, Secretary.

Bids received until May 18, 1915.

Street Paving

Charleston, S. C., April 16, 1915.

Sealed Proposals in duplicate will be received at this office until 1 P.M. Tuesday, May 18th, 1915, for 65,000 square yards, more or less, of paving on concrete base, of which it is estimated that 20,000 square yards to 25,000 square yards will be Creosoted Wood Block and the remainder Sheet Asphalt, Asphaltic or Bituminous Concrete or Bitulithic. Specifications will be furnished prospective Bidders upon receipt of $5.00 as guarantee for their return. The right is reserved to reject any or all bids.

J. H. DINGLE, City Engineer.

Bids received until May 10, 1915.

Bids for Storm Sewer

Cynthiana, Ky.

Bids for the construction of 2800 feet of storm sewer will be received until May 10, 1915. For further information address B. R. MYERS, City Engineer, Cynthiana, Ky.

Bids received until May 6, 1915.

Water Pipe and Castings

OFFICE OF THE BOARD OF STREET AND WATER COMMISSIONERS OF THE CITY OF NEWARK, N. J.
CITY HALL,
Newark, N. J., April 26, 1915.

Sealed proposals for straight cast iron water pipe and special castings for both the low and high pressure systems will be received at this office from 3:15 to 3:30 o'clock p.m. on Thursday, May 6th, 1915, and opened at the last named hour at a public meeting of the Board to be held at said time and place for:

600 tons (of 2000 lbs.) of 6-inch cast iron water pipe 29 tons (of 2000 lbs.) of 8-inch cast iron water pipe 77 tons (of 2000 lbs.) of 10-inch cast iron water pipe 500 tons (of 2000 lbs.) of 12-inch cast iron water pipe	1206 tons
Ordinary special castings from 4 to 12 inches in diameter	65 "
600 tons (of 2000 lbs.) of 16-inch cast iron water pipe 625 tons (of 2000 lbs.) of 20-inch cast iron water pipe 280 tons (of 2000 lbs.) of 24-inch cast iron water pipe	1505 tons
Ordinary special castings from 16 to 24-inch dia.	35 "
1310 tons (of 2000 lbs.) of 36-inch cast iron water pipe	1310 tons
Ordinary special castings of 36-inch diameter	50 "
13 tons (of 2000 lbs.) of 6-inch HIGH PRESSURE cast iron water pipe 19 tons (of 2000 lbs.) of 8-inch HIGH PRESSURE cast iron water pipe 819 tons (of 2000 lbs.) of 12-inch HIGH PRESSURE cast iron water pipe	851 tons
Special castings for HIGH PRESSURE system (according to specifications and drawings)	50 "

Bids for the above work to be made in the following manner:

A price per ton (of 2000 lbs.) for the 1206 tons of 6", 8", 10" and 12" pipe;
A price per ton (of 2000 lbs.) for the 65 tons of ordinary special castings from 4 to 12 inches in diameter.
A price per ton (of 2000 lbs.) for 1505 tons of 16", 20" and 24" pipe;
A price per ton (of 2000 lbs.) for 35 tons (of 2000 lbs.) of ordinary special castings from 16 to 24 inches in diameter.
A price per ton (of 2000 lbs.) for 1310 tons of 36-inch cast iron water pipe;
A price per ton (of 2000 lbs.) for 50 tons of special castings of 36-inch diameter.
A price per ton (of 2000 lbs.) for 851 tons of 6", 8" and 12" HIGH PRESSURE cast iron water pipe;
A price per ton (of 2000 lbs.) for 50 tons of special castings for the HIGH PRESSURE system.

For the purpose of comparing bids in order to ascertain the low bidder the summation of prices at the respective quantities for ordinary pipe and specials from 4 to 12 inches in diameter will be included in one contract; the pipe and specials from 16 to 24 inches in diameter in another contract; the pipe and special castings for the 36-inch pipe in a third contract; and the pipe and special castings from 6 to 12 inches in diameter for the HIGH PRESSURE system in a fourth contract.

All f.o.b. cars Newark, N. J., according to specifications and drawings which will be furnished upon application to the engineer and superintendent of the department of water.

Proposals must be accompanied by the consent in writing of two sureties (residents of Essex County, N. J.) or surety company authorized to do business in New Jersey who qualify as to their responsibility in the amount of the proposal and agree to become sureties for the faithful performance of the contract, if awarded.

Each proposal must be enclosed in a sealed envelope properly endorsed (Proposal for Cast Iron Pipe and Special Castings) with the name of the bidder and directed to the Board of Street and Water Commissioners of the City of Newark, N. J.

The contract to be awarded to the lowest bidder for each separate division of the quantities, the Board reserving the right to reject any or all bids.

By direction of the Board.

MORRIS R. SHERRERD, Chief Engineer.

U. S. ENGINEER OFFICE, First District, New York City, Room 710 Army Building, 39 Whitehall Street, New York, N. Y., April 28, 1915.—Sealed proposals for constructing and delivering combination drill scow and dredge "General Gillespie" will be received at this office until 12 M., May 28, 1915, and then publicly opened. Information on application. W. M. BLACK, Col., Engrs.

Contractors

BIDS OPENED MAY 18, 1915,

for the construction of Section No. 2 of Route No. 49, being a part of the Culver Rapid Transit Railroad.

A three-track elevated railroad in the Borough of Brooklyn, beginning at a point in Gravesend Avenue about 525 feet south of Bay Parkway and extending southerly over Gravesend Avenue and Shell Road to a point about 525 feet south of Avenue X produced.

Write or call concerning form of contract, plans and specifications.

PUBLIC SERVICE COMMISSION FOR THE FIRST DISTRICT,
154 Nassau Street, New York City.

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PROPOSALS FOR STORM-WARNING LANTERNS—U. S. Department of Agriculture, Washington, D. C., April 15, 1915.—Sealed proposals for furnishing storm-warning lanterns, as specified, f.o.b. factory, will be received here until noon, May 18, 1915, and then opened. Information furnished upon application to the Chief of Weather Bureau. Samples of the lanterns proposed to be furnished, to be submitted in connection with bid. Envelopes containing proposals should be indorsed "Proposals for Storm-warning Lanterns," and addressed to Chief, U. S. Weather Bureau, Department of Agriculture, Washington, D. C.

U. S. ENGINEER OFFICE, Kansas City, Mo., April 20, 1915.—Sealed proposals for constructing about 2250 feet standard 3-row timber dike, and about 12,000 feet standard revetment on Missouri River, about 163 miles below Kansas City, and 9 miles below Glasgow, will be received at this office until 12 M., May 20, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

U. S. ENGINEER OFFICE, Room 325 Custom House, New Orleans, La., Mar. 29, 1915—Sealed proposals for furnishing coal for United States plant from July 1, 1915, to June 30, 1916, will be received at this office until 11 A.M., May 3, 1915, and then publicly opened. Information on application. EDWARD H. SCHULZ, Maj., Engrs.

U. S. ENGINEER OFFICE, Louisville, Ky., April 19, 1915.—Sealed proposals for a Steel Hull for Dredge "Nolin River" will be received here until 12 noon, central time, May 19, 1915, and then publicly opened. Information on application. J. C. OAKES, Major, Engrs.

U. S. ENGINEER OFFICE, Pittsburgh, Pa., April 21, 1915.—Sealed proposals for building two lockkeepers' houses at Dam No. 1, Monongahela River, will be received at this office until 12 M. (Eastern Standard Time), May 21, 1915, and then publicly opened. Information on application. HAROLD C. FISKE, Captain, Engrs.

TREASURY DEPARTMENT, U. S. Coast Guard, Washington, D. C., April 12, 1915.—Sealed proposals will be received at this office until 2 o'clock P.M., of Thursday, May 20, 1915, and then publicly opened, for the construction of a rubble mound breakwater at the Marblehead Coast Guard Station, Marblehead, Ohio. Specifications and drawings, form of proposal, etc., and full information can be obtained upon application to the Superintendent, 10th District, Coast Guard, Buffalo, N. Y., the Keeper, Marblehead Coast Guard Station, Marblehead, Ohio, or to this office. E. P. BERTHOLF, Captain Commandant.

U. S. ENGINEER OFFICE, Kansas City, Mo., April 20, 1915.—Sealed proposals for constructing about 5900 feet standard 3-row timber dike on Missouri River, about 50 and 53 miles below Kansas City, and 1 mile below Napoleon and 1 mile above Camden, will be received at this office until 12 M., May 20, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

DEPARTMENT OF THE INTERIOR, Washington, D. C., April 19, 1915.—Sealed proposals in duplicate will be received at this Department until 2 o'clock p.m., Tuesday, May 11, 1915, and then opened, for the furnishing of all labor and material (unless otherwise specified) which shall be required for rewiring the third floor and galleries of the Patent Office Building, Seventh and F Streets, N.W., Washington, D. C., and making all connections ready for service, in accordance with plans and specifications, copies of which may be obtained upon application to the chief clerk of the department. Proposals should be securely enveloped, marked "Proposal for rewiring third floor and galleries, Patent Office Building," and be addressed to the Secretary of the Interior. BO SWEENEY, Assistant Secretary.

U. S. ENGINEER OFFICE, Kansas City, Mo., April 10, 1915.—Sealed proposals for constructing about 4,200 feet standard 3-row timber dike on Missouri River, about 12 and 20 miles below Kansas City, and about one-half mile below Cement City and near So. Liberty, will be received at this office until 12 M. May 10, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

OFFICE OF THE COMMISSIONERS, D. C., April 28, 1915.—SEALED PROPOSALS will be received at this office, Room 509 District Building, until 2 o'clock P.M., on May 12, 1915, for the construction of Sewers in the District of Columbia, involving the construction of about 2,200 linear feet of trunk sewer, 6 feet 9 inches to 6 feet 3 inches diameter. Forms of proposals, specifications and necessary information may be obtained from the Chief Clerk, Engineer Department, Room 427 District Building, Washington, D. C. OLIVER P. NEWMAN, LOUIS BROWNLOW, CHARLES W. KUTZ, Commissioners, D. C.

Bids received until May 5, 1915.

Notice to Bridge Contractors

Cumberland, Md.

Bids will be received by the Mayor and City Council of Cumberland, Md., up to 9:30 o'clock A.M., May 5th, 1915, for the construction of a concrete twin arch bridge at Market Street over Wills Creek, clear span of each 65 feet.

Plans and specifications can be procured at office of City Engineer, City Hall, on deposit of ten dollars ($10.00), to be refunded if same be returned in good condition.

The right is reserved to reject any and all bids if not satisfactory to the Mayor and City Council.

JAMES P. GAFFNEY, City Engineer.

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OFFICE, COMMISSIONERS, DISTRICT OF COLUMBIA, Washington, April 24, 1915.—Sealed Proposals will be received at the office of the Secretary of the Board of Commissioners, Room 509, District Building, until 2 o'clock P.M., May 21, 1915, for paving various streets and avenues in the District of Columbia with sheet asphalt. Forms of proposal, specifications and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. OLIVER P. NEWMAN, LOUIS BROWNLOW, CHARLES W. KUTZ, Commissioners, D. C.

OFFICE, COMMISSIONERS, DISTRICT OF COLUMBIA, Washington, April 24, 1915.—Sealed Proposals will be received at the office of the Secretary of the Board of Commissioners, Room 509, District Building, until 2 o'clock P.M., May 21, 1915, for laying asphalt-block pavements in the District of Columbia. Forms of proposal, specifications and necessary information may be obtained from Chief Clerk, Engineer Department, Room 427, District Building, Washington, D. C. OLIVER P. NEWMAN, LOUIS BROWNLOW, CHARLES W. KUTZ, Commissioners, D. C.

U. S. ENGINEER OFFICE, Wheeling, W. Va., April 28, 1915.—Sealed proposals for furnishing and erecting steel lock gates for Dams Nos. 12 and 20, Ohio River, will be received at this office until 11 a.m. (Eastern time), May 18, 1915, and then publicly opened. Bids will be considered for lock gates for one or both dams. Information on application. T. H. JACKSON, Major, Engrs.

TREASURY DEPARTMENT, U. S. Coast Guard, Washington, D. C., April 22, 1915.—Sealed proposals will be received at this office until 2 o'clock P.M. of Wednesday, May 26, 1915, and then publicly opened, for moving and altering the Sandy Hook Coast Guard Station, Fort Hancock, New Jersey. Specifications and drawings, form of proposal, etc., and full information can be obtained upon application to the Superintendent, Fifth District, Coast Guard, Asbury Park, N. J., the Keeper, Sandy Hook Coast Guard Station, Fort Hancock, N. J., or to this office. E. P. BERTHOLF, Captain Commandant.

U. S. ENGINEER OFFICE, Louisville, Ky., April 12, 1915.—Sealed proposals for two steel dump scows will be received here until 12:00 noon, Central Time, May 13, 1915, and then publicly opened. Information on application. J. C. OAKES, Major, Engrs.

U. S. ENGINEER OFFICE, Wilmington, N. C., Apr. 26, 1915.—Sealed proposals for furnishing and delivering about 22,000 barrels of Portland cement will be received at this office until 12 M., May 26, 1915, and then publicly opened. Information on application. H. W. STICKLE, Maj., Engrs.

U. S. ENGINEER OFFICE, Wilmington, N. C., Apr. 26, 1915.—Sealed proposals for furnishing and delivering about 19,700 tons of crushed stone will be received at this office until 1 P.M., May 26, 1915, and then publicly opened. Information on application. H. W. STICKLE, Maj., Engrs.

U. S. ENGINEER OFFICE, Savannah, Ga., April 26, 1915.—Sealed proposals for construction and delivery of two (2) steel lighters will be received at this office until 12 o'clock, Noon (Eastern Standard Time), May 26, 1915, and then publicly opened. Information on application. W. C. LANGFITT, Colonel, Engineers.

U. S. ENGINEER OFFICE, Norfolk, Va., Apr. 7, 1915.—Sealed proposals for furnishing about Three Thousand (3000) Tons of Bituminous Coal will be received at this office until 12 M., May 7, 1915, and then publicly opened. Information on application. J. P. JERVEY, Lt.-Col., Engrs.

SEALED PROPOSALS will be received at the Office of the Lighthouse Inspector, Buffalo, N. Y., until 2 o'clock p.m., May 12, 1915, and then opened, for furnishing metalwork for superstructure of Ashtabula West Breakwater Light Station, Ashtabula Harbor, Ohio. Blank proposals and particulars may be obtained by addressing the above office.

PROPOSALS FOR LEVEE WORK—Mississippi River Commission, 1st & 2d Districts, Room 20, Custom House, Memphis, Tenn., April 27, 1915.—Sealed proposals for constructing about 4,500,000 cubic yards of levee work in the Upper and Lower St. Francis, and White River Levee Districts, will be received at this office until 11 a.m., May 26, 1915, and then publicly opened. Information upon application. E. M. MARKHAM, Maj., Engrs.

U. S. ENGINEER OFFICE, Kansas City, Mo., April 10, 1915.—Sealed proposals for constructing about 9000 feet standard revetment on Missouri River, about 24 miles below Kansas City, and two miles from Atherton, will be received at this office until 12 M., May 10, 1915, and then publicly opened. Information on application. HERBERT DEAKYNE, Lieut.-Col., Engrs.

Classified Advertising

Positions Wanted, 3 cents a word, minimum charge 50 cents an insertion, payable in advance.

Positions Open, (Civil Service Examinations), **Employment Agencies** (Labor Bureaus), **Business Opportunities, Wanted** (Agents and Salesmen—Contract Work), **Miscellaneous** (Educational—Books), **For Sale,** 5 cents a word, minimum charge $1.00 an insertion.

Count four words for keyed address care of New York; five for Chicago. Abbreviated words or symbols count as full words.

Copy should reach us not later than 10 A.M. Wednesday for that week's issue. Answers addressed to our care, Tenth Avenue at Thirty-sixth St., New York or 1144 Monadnock Block, Chicago will be forwarded (excepting circulars or similar literature).

No information given by us regarding keyed advertiser's name or address. Original letters of recommendation or other papers of value should not be inclosed to unknown correspondents. Send copies.

Advertisements calling for bids, $3.60 an inch per insertion. N

POSITIONS WANTED

Mechanical and Electrical Engineers

MECHANICAL ENGINEER, 7 years' well-balanced experience, designer, executive, and salesman. Thoroughly familiar cement mill and contractors' machinery. Want secondary executive position with manufacturer building medium to heavy machinery, P. W. 182, Eng. News.

MECHANICAL and STRUCTURAL ENGINEER, technical graduate, eight years' experience in the design and detail of power plants, excavating machinery, bridges, buildings, and reinforced concrete structures. Excellent references. P. W. 192, Eng. News, Chicago.

Civil Engineers

CIVIL ENGINEER, college graduate; five years' experience, design and construction, docks, bridges, surveys. P. W. 179, Eng. News.

GRADUATE CIVIL ENGINEER wants work of any kind in the engineering line; five years' experience, land surveys, canal, roads, sewers and street paving. P. W. 76, Eng. News.

CIVIL ENGINEER AND DRAFTSMAN, nine years' experience railway location and construction, designing, detailing, estimating and supervising erection of steel and reinforced-concrete mill buildings and other structures; location immaterial. P. W. 215, Eng. News.

CIVIL ENGINEER, 45, now employed, is desirous of obtaining position in charge of construction with large company; experience includes railroad location, maintenance-of-way and construction, both steam and electric; general municipal work, with very large sewer design and construction work; highway construction; sewage-disposal experimentation and practice; drawing of specifications of many kinds; organization of construction work; planning records of cost for control purposes; field of work has extended from Atlantic to Pacific and from British Columbia to Central Venezuela; prefers local work, but will go abroad; has good working knowledge of Spanish. P. W. 132, Eng. News.

CIVIL ENGINEER, graduate, married, seven years' experience field and office in mines, property, surveys, railroad maintenance, steel works, bridges and road construction; references; location immaterial. P. W. 120, Eng. News.

CIVIL ENGINEER; college graduate; Assoc. M. Am. Soc. C. E.; 10 years' experience, design and construction, docks, bridges, roads, canals, surveys. P. W. 152, Eng. News.

CIVIL ENGINEER AND SUPERINTENDENT, 31; graduate; nine years' wide experience on surveys, drainage, sewers, sewage disposal, water and paving; good draftsman and designer; available now; personal interview East or South. P. W. 154, Eng. News.

CIVIL ENGINEER, 17 years' experience, surveys and construction railways and hydraulic development; good draftsman; speak Spanish. P. W. 184, Eng. News.

CIVIL ENGINEER and Superintendent, Associate Member American Society. Ten years' experience. Three years railway surveys and construction. Three years engineer sewer construction. Three years superintendent sewer and water works. Speaks Spanish. References. P. W. 181, Eng. News.

CIVIL ENGINEER, university graduate, 2 years' building experience, now at concrete design seeks location with contractor or engineer, New York or vicinity. P. W. 187, Eng. News.

CIVIL ENGINEER, 27, graduate, 4 years experience in sewer construction, irrigation location and construction, railway maintenance, cement and concrete testing. P. W. 186, Eng. News.

CIVIL ENGINEER, graduate, 14 years' practical experience; water works and municipal consulting engineering; design and construction, earth, masonry, concrete and steel; investigations, reports, appraisals, fire protection; excellent references. P. W. 199, Eng. News.

CIVIL ENGINEER and superintendent, 13 years' experience in designs, surveys, supervision of construction on large work; open for position in about two weeks. P. W. 201, Eng. News.

GRADUATE CIVIL ENGINEER, 13 years' experience in all classes of steel structures, bridges and subways; shop drawings, estimating and designing, past 10 years with leading bridge company, desires change. P. W. 202, Eng. News.

CIVIL ENGINEER, graduate, 2½ years' experience, railroad location and maintenance, desires position with construction company, contractor or engineer; willing to start at bottom. P. W. 205, Eng. News.

YOUNG MAN, graduate civil engineer, Cooper Institute, wishes work of any kind; location immaterial. P. W. 210, Eng. News.

TECHNICAL GRADUATE, three years' experience estimating and construction, desires position with contractor, engineer or selling. P. W. 207, Eng. News.

ENGINEER, 34, wants position at anything in civil engineering or associated work; salary secondary; broad experience in municipal construction work; Assoc. Mem. Am. Soc. C. E.; highest references. P. W. 208, Eng. News.

CIVIL ENGINEER; 27; Cornell graduate; 6 years' experience on dam, canal, municipal and sanitary design and construction; executive ability, capable and forceful; capable of directing work as well as designing same; first class references; can report immediately. P. W. 209, Eng. News.

YOUNG MAN, graduate civil engineer, Cooper Institute, wishes work of any kind; location immaterial. P. W. 211, Eng. News.

Bridge and Structural

STRUCTURAL ENGINEER, thorough designer, checker, squad man; 15 years' experience; wants responsible position. P. W. 177, Eng. News.

Surveyors

YOUNG MAN with 11 years' experience in railroad and general engineering desires position as transitman on any class of work; location immaterial; best references. P. W. 178, Eng. News.

Draftsmen

DRAFTSMAN or assistant to engineer on railroad, electrical, industrial and power plant work; hustling young man, with 4 years' engineering experience and 4½ years field and shop work, desires an opportunity. 1760 President St., Brooklyn.

COLLEGE AND TECHNICAL GRADUATE, employed with railroad; expert estimating, designing, checking steel, masonry, reinforced concrete; excellent references; desires change. P. W. 197, Eng. News.

STRUCTURAL DRAFTSMAN; technical graduate; 5 years' experience designing, checking and detailing bridges and buildings. P. W. 204, Eng. News.

DRAFTSMAN—All around, mill engineering designer, 8 years' office, 4 years' shop experience desires permanent position in this line with reliable concern. Executive ability. P. W. 188, Eng. News, Chicago.

STRUCTURAL DRAFTSMAN, 6 years' experience, checking and detailing tall and industrial buildings, technical graduate. P. W. 189, Eng. News.

Superintendents, Etc.

GRADUATE ENGINEER, 29, six years' experience on extensive surveys, irrigation, railways, foundations, mining and valuation surveys; responsible position only; references. P. W. 131, Eng. News.

YOUNG MAN, graduate engineer, wishes engineering employment; character of work and location immaterial. P. W. 158, Eng. News.

SUPERINTENDENT OF PAVING; 18 years' experience; eight years on wood block; will go anywhere. P. W. 159, Eng. News.

DO YOU NEED A FIRST-CLASS ENGINEER? Perhaps I may suit; 14 years' railroad, sanitary and general construction; desire executive position in field or office; have position at present. P. W. 161, Eng. News.

COMPETENT DESIGNER, detailer and draftsman with extensive experience on structural steel, concrete and timber construction desires position; first-class references; also experienced in estimating and ornamental iron work. P. W. 150, Eng. News.

TECHNICAL GRADUATE, 6 years drafting, checking, estimating, wants position; architect preferred. P. W. 206, Eng. News.

GRADUATE ENGINEER, 30, with thorough experience in estimating, designing and construction of steel, brick and reinforced-concrete work, design and building of cement plants; experienced in organizing forces and handling men and work; closing engagement May 27 as engineer in charge of construction on work amounting to $325,000; responsible position desired; references. P. W. 200, Eng. News.

TECHNICAL GRADUATE, 29, six years' experience on reinforced concrete and factory construction desires position as architect or contractor's superintendent; at present employed. P. W. 198, Eng. News.

ENGINEER; ten years in South America; thorough acquaintance language, customs, costs. Best references. P. W. 157, Eng. News, Chicago.

GRADUATE ENGINEER, 28, five years' experience, surveys, railroad construction, topographic surveys and road construction tropics, go anywhere, prefer Spanish America. P. W. 193, Eng. News, Chicago.

ENGINEERING ASSISTANT experienced in cost accounting, statistical work, correspondence and office management, seeks position. P. W. 194, Eng. News.

AS ASSISTANT PROFESSOR or instructor; two years' experience teaching structural engineering and materials testing with a leading Eastern institution; five years' previous experience as structural designer. Desire new location with opportunity for advancement. P. W. 191, Eng. News.

SUPERINTENDENT of construction capable of taking charge of field and office work on locks, dams and water works projects. Associate Member American Society of Civil Engineers; twelve years' experience; open for engagement May 1. P. W. 190, Eng. News.

MAN OF WIDE EXPERIENCE desires position with contractor; general superintendent, manager, estimator; has been principal and knows what employer wants. P. W. 185, Eng. News.

FOREMAN (Italian), good education in both languages; good knowledge in every kind of work. P. W. 183, Eng. News.

YOUNG MAN, American, 24 years of age, with about five years' experience as rodman, instrumentman and inspector on roadways, highway bridges, railroad surveying and construction, and subway construction, seeks position with engineering or conytracting firm; willing to travel or locate anywhere; employed at present; salary not main object. P. W. 213, Eng. News.

ENGINEER DRAFTSMAN and instrumentman, 12 years' experience in general work for industrial buildings in steel, reinforced concrete, timber construction, foundation work, field work, etc., wishes position with industrial corporation, general contractor or consulting engineer. P. W. 203, Eng. News.

POSITIONS OPEN

A CENTRIFUGAL PUMP DESIGNER with experience in designing high-speed pumps of small and medium sizes for high- and low-head service; applicants must state fully their experience, age and salary expected. P. 153, Eng. News.

EXPERIENCED DRAFTSMEN, neat letterers, for valuation maps and profiles. Location Tennessee. Salary $75.00. Submit samples of work and give experience. P. 214, Eng. News.

GRADUATE CIVIL or MECHANICAL ENGINEER with one or two years' experience preferred for position in engineering and sales department. Character and natural ability will count more than experience. Good opportunity for advancement after one or two years experience in estimating and drafting. Give complete itemized statement of education and experience, also salary desired. P. 195, Eng. News.

Employment Agencies

The Employment Agencies advertising in this paper agree to refund any registration fee on demand any time within the first six months when no position is secured.

TECHNICAL ENGINEERS in every line for available positions; employers and applicants write The Toledo Engineering Agency, Toledo, Ohio.

ENGINEERS, ARCHITECTS AND DRAFTSMEN wanted. The Kansas City Engineering Agency, 323 Midland Building, Kansas City, Mo.

LABOR BUREAUS

SPECIAL ADVANTAGES to contractors or others employing skilled or unskilled laborers. Commissary privileges optional. Central Labor Agency, 139 Mulberry St., New York. (Telephone 8970 Canal.)

CONTRACTORS—On your next job let me board your men and furnish commissary. I will pay commission. L. B. 175, Eng. News.

WANTED

COPIES OF ENGINEERING NEWS of March 4, 11, 18 and 25, 1915. Will pay 20 cents each. Subscription Dept., Engineering News.

AGENTS AND SALESMEN

ENGINEER OR DRAFTSMAN to sell WINSLOW direct-reading, beam and reinforced concrete calculating SLIDE-RULES. Simple, quick. Good opportunity for first agent in each city. Henry W. Tomlinson, 62 East Van Buren St., Chicago.

BUSINESS OPPORTUNITIES

LIMESTONE QUARRY TO LEASE at Ogdensburg, N. J.; railroad siding; crushing machinery; best quality agricultural lime. Address Frederic Bigelow, 1 Clinton St., Newark, N. J.

CONSTRUCTION COMPANY (specializing concrete work), newly incorporated, offers good opportunity to man who can invest at least three thousand dollars ($3000). No triflers. Address Concrete, Room 416, 145 Nassau St., N. Y. C.

CORRESPONDENCE COURSES

of instruction and practical work in designing and estimating the cost of structures of steel and reinforced concrete have been prepared by a well known Consulting Engineer.

FOR ENGINEERS

The personal attention of the engineer who prepared these courses is given to all the work submitted by each subscriber and therefore the membership is limited.
Two separate courses are offered, under the following designations,—

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REINFORCED CONCRETE ENGINEERING

These courses are *not* a duplication of the work given in technical colleges on these subjects, and are *not* a re-hash of matter taken from text books. This work differs from either because it gives the short concise practical methods actually used by engineers in such work, supplemented by labor saving tables and diagrams. They

PROVIDE ACTUAL EXPERIENCE

and save years spent in mis-directed efforts which are a nec ssary result of trying to acquire experience without the direct aid and assistance of an engineer properly experienced in such work.

Address M. 180, Engineering News

For Sale
Second Hand Equipment

Rates: Less than 4 insertions 55 cents per line—4 to 11 insertions 50 cents per line—12 or more insertions 45 cents per line.

Equipment Wanted items appear at the end of this list.

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ADVERTISERS' NAMES are abbreviated in most of these items. Complete names and addresses are as follows:

AMERICAN Construction Co., 108 N. Delaware St., Indianapolis, Ind.—All equipment listed as good as new, used only short time.
BECKWITH, J. S., 108 Park Way, N. S., Pittsburgh, Pa.
BRADEN, James C., 26 Cortlandt St., N. Y. City.
CONTRACTORS' Service Co., 50 Church St., N. Y. City.
DARLETT & CO., Harrison Bldg., Phila., Pa.
DOUGLAS, George B., 29 Broadway, New York, N. Y.
GIVIN Co., Herbert, 30 Church St., N. Y. City.
GRIMSHAW Co., Wm. B., 688 Drexel Bldg., Phila., Pa.
HITNER'S Sons Co., Henry A., Philadelphia, Pa.
HOISTING Engine Sales Co., 120 West 32d St., New York.
JENNISON-Wright Co., The, 313 Huron St., Toledo, O.
LINES FLYNN Co., Inc., 30 Church St., N. Y. City.
MARINE Metal & Supply Co., 167 South St., N. Y. City.
NEW RIVER Co., The, Macdonald, W. Va.
PIPE & Contractors Supply Co., 3 Dover St., N. Y. City.
SAMPSON Co., Geo. H., 13 Pearl St., Boston, Mass., and 42 B'way, N. Y. C.; or Winston & Co., Brown Station, N. Y.
SCHMIDT, Jr., & Co., C. G. A., Empire Bldg., Phila., Pa.
SOUTHERN Iron & Equipment Co., Atlanta, Ga.
STALLEY, G. T., Box 390, Cleveland, Ohio.
WHITNEY, O. R., 39 Cortlandt St., N. Y. C. (Cort. 6095)

AIR COMPRESSORS

2—Ingersoll-Rand, Cross Compound steam and air cylinders with Corliss valve gear 2500 cu. ft. capacity.—SAMPSON.

2—Ingersoll-Rand, Cross Compound Steam and Air Cylinders with Corliss valve gear 3300 cu.ft. capacity. Boilers and Condensers with this plant. All in good condition. Bargain.—SAMPSON.

1—4700 Cu. Ft. Rand B. B. 3 Compound Steam and Compound Air Compressor with Condenser.—SAMPSON.

Several second-hand air compressors, steam and belt driven, straight line and two stage of various sizes from 70 to 1300 cu. ft. capacities. Good condition.—SAMPSON.

1—22x22-13-¼x24, Sullivan, steam driven, class WB 2, straight line, 2 stage, cap., 1160 cu. ft., 1—24x24x30, McKiernan, class A, straight line, steam driven, cap. 1414 cu. ft.; 1—24x24-¼x30, Ingersoll, class A, steam driven, straight line, cap. 1223 cu. ft., 2—16x20-¼x16, Ingersoll-Sargeant, class H-1, duplex, steam driven, cap. 1540 cu. ft.—HITNER'S.

Steam driven 3 Laidlaw-Dunn-Gordon duplex 2-stage, and 5 Norwalk tandem 2-stage, capacities 900 to 2100 cu.ft., condition excellent.—NEW RIVER.

3—24"x24"x30" Rand S. L. Price $1000 each.—L. F. SEYFERT'S SONS, INC., 437 N. 3rd St., Phila., Pa.

American 10x10x10 straight line, steam driven, cap. 236 cu.ft.; Ingersoll-Rand 8x8x8 straight line, steam driven, cap. 100 cu.ft.; Clayton 8x8x7 duplex, cap. 150 cu.ft.—MARINE.

BELT CONVEYORS

1—14" and 1—16" 50' centers.—GIVIN.

BOILERS

5—250 H.P. B. & W., 150 lbs. steam. Horizontal return tubular, 2—72"x20', 1—78"x20', 1—72"x18', 1—72"x15', 1—72"x14', triple riveted, butt strapped, 125 lbs. steam.—HITNER'S.

35, 60 and 80 H.P. loco. boilers—PIPE.

6—550 H.P. Altman Taylor B. & W. type, 150 lbs. pressure, complete with steel supporting structure—Arranged to set two in battery; one battery equipped with Taylor stokers.—HENRY R. KENT & CO., 141 Broadway, New York, N. Y.

2 New Marine, 10x11'; prompt delivery.—WHITNEY.

4—125 H.P. and 2—150 H.P. Horizontal return tubulars, butt strapped, triple riveted.—MARINE.

BUCKETS

1—1 yd. Theo. Smith Orange Peel.—PIPE.

5—¾ cu. yd. standard clam shells.—STALLEY.

Hayward 1⅝ yd., Mead & Morrison 1½ yd., Smith 1 yd. and Union Iron Works ¾ yd. clam shells; Hayward 7 cu.ft. orange peel; 10—Steubner 1¼ yd. "Excelsior" bottom dump concrete.—MARINE.

96—42 cu.ft. Stuebner tip-over buckets.—SCHMIDT.

1 "Haiss" ¾ yd. and 1 "Haiss" 1 yd. clamshell, in first-class shape; used short time. Digging teeth can be installed. —GEO. HAISS MFG. CO., 142nd St. and Rider Ave., N. Y. City.

CARS

[Standard Gauge]

45—80,000 lb. flat cars, cheap.—WHITNEY.

[36" Gauge]

50—4 yd. 1-way So. Baltimore, $50 each. 8—K. & J. 3-yd. 2-way, overhauled, $70 each.—GRIMSHAW.

[24" Gauge]

1½ yd. Western with Vulcan Dinkey.—DALLETT.

10—1 yd. swivel end dump cars.—PIPE.

80—36 cu.ft. Koppel "V" body.—SCHMIDT.

CRUSHERS

Gyratory, Nos. 8, 7½, 6, 5, 4, 3.—GIVIN.

1 No. 2 Climax on trucks with 15' elevator with 18 H.P. mounted Climax portable engine and boiler.—BECKWITH.

1 Climax Portable plant complete, A1.—GIVIN.

1—18x36 Farrell; 1—24x36 Buchanan.—SCHMIDT.

1 Portable Champion No. 3 jaw stone with elevators.—JENNISON.

1 Sturtevant, in perfect condition, used but 10 days; will sell cheap.—ARTHUR L. BATES, Meadville, Pa.

DERRICKS

1 steel stiff leg 70 ft. boom with cast steel bull wheel, capacity 25 tons.—MARINE.

DREDGES

Hydraulic and dipper. Sale or charter.—GIVIN.

DRILLS

6 Ingersoll, type F-24, and 2 class "C" Little Giant rock drills.—BECKWITH.

ELECTRIC LIGHTS

For sale at less than half cost. Sixty 300 C.P. D.C. 220 V. Nernst arc lamps, moon globes. In perfect running condition. Can be seen in use in our offices; $4 each. (Regular price, $9.50). Price includes drop lighting switch. Must sell as our voltage is 110 in new office. HILL PUBLISHING CO., 10th Ave. at 36th St., New York.

ENGINES, GAS

1 8 H.P. Vertical Type Fairbanks with sub-base.—SAMPSON

100 HP. Elyria tandem gas engine with air tank and engine; all in good shape; will sell cheap.—THE JACOBS LUMBER CO., Youngstown, Ohio.

GENERATORS

Western Electric 100 K.W. dir. con. to 14x14 engine, 240 volts; 2 Western Electric 60 K.W. belt, 125 volts.—MARINE.

GRADERS, ELEVATING

1 Austin.—AMERICAN.

FIRE ENGINES

2 Fire Engines, condition, first class.—HITNER'S.

HAMMERS

1 No. 4 Arnott.—PIPE.

HOISTING ENGINES

2—3 drum Nationals, one 10x12 and one 8¼x10, with boilers; Lambert 8½x10 D.D.D.C. Skeleton; 7½x10 D.D.D.C. Skeleton, 15 other makes and sizes.—MARINE.

1 3 drum National hoist 10x12 with boiler and three independent winch-heads, excellent condition; 4 7x10 D.C.D.D. Lidgerwood with boilers; 1 Lidgerwood D.C.D.D. with swinger, skeleton 7x10, and 1 National D.C.D.D. with swinger, skeleton 7x10.—PIPE.

2 Lidgerwood 14x18, D.C. 3-tandem drum, reversible link motion; 1 Lidgerwood, 10x12, D.C. S.D. reversible link motion; 1 Lambert, 10x12, D.C. D.D. with boiler; 2 Lambert, 8x10, D.C. D.D. with Mass. boilers; 1 Lambert 7x10, D.C. D.D. with boiler; 1 Mundy, 7¼x10, D.C. D.D. with boiler; 1 Mundy, 6¼x10, D.C. D.D. with boiler; 1 O. & S. 6¼x8, D.C. D.D. with boiler. 2 Lidgerwood, 60 H.P. D.D. and swinger d.c. hoists.—HITNER'S.

THREE HUNDRED hoists, 2 or 3 drum 7x10, 8¼x10, 9x10, 10x12, skeleton or boilers; 100 electric.—HOISTING.

INSTRUMENTS, SURVEYING

Second-Hand Transits, Levels, etc. Bought, sold or exchanged. Send for list of Second-Hand Instruments. Get our prices before ordering. WILLIAMS, BROWN & EARLE, Inc., Engineering Supplies, Dept. E, 918 Chestnut St., Phila.

$175 K & E No. 5025 Precision 3 screw Y level, new, $133; $220 K & E 5040 Fine Tr., good working order, $125—Guaranteed. 99 others. Rentals, repairs, supplies.—ARCHITECTS' & ENGINEERS' SUPPLY CO., Kansas City, Mo.

Keuffel & Esser mining and engineering transit, a bargain. —E. P. DUPEN, Bisbee, Ariz.

Keuffel & Esser Engineer's transit No. 5040 X, Serial 2723, complete; Gurley level complete; 2 leveling rods; 2 range poles; steel marking pins; 75 and 100 ft. steel tapes. All equal to new. Will arrange for inspection.—F. S. 212, Eng. News.

LOCOMOTIVES

[Standard Gauge]

1 Porter, Std. G., 20-ton, 12x18, saddle tank.—DOUGLAS.

50 locomotives, Switch, Mogul, Consolidation, Ten Wheel and Saddle Tank types.—SOUTHERN.

2—40 ton switchers, overhauled.—CONTRACTORS S. CO.

[36" Gauge]

10 10x16" Porter, Davenport and Vulcans.—SOUTHERN.

5 9x14" Porters.—SOUTHERN.

2—9x14 Baldwin saddle tank.—BECKWITH.

5—10x16 Vulcans, 1911-12.—CONTRACTORS S. CO.

20 ton, 11x16" Davenport, built 1907, $1175.—GRIMSHAW.

LOCOMOTIVE CRANES

4 and 8-wheel, 10, 15 and 20 tons capacity.—HOISTING MACHINERY Co., 48 Church St., New York City.

4 and 8 wheel 10 and 15 ton.—CONTRACTORS S. CO.

15-ton Browning, 4-wheel, S. G., 50' boom.—DALLETT.

1—7 Ton, 4 wheel, Industrial, 21' boom; 1—15 ton, 8-wheel, Industrial, wrecking crane, 20' boom, goose neck.—HITNER'S.

15 ton excellent condition, cheap.—STALLEY.

4 and 8 wheel, 10, 15, 20 and 25 tons capacity.—GIVIN.

1—10 ton 4 wheel Brown hoist, A1 condition; low price for quick sale.—GIVIN.

MIXERS (Asphalt and Concrete)

Hadsel 2 yd. Batch with engine; Ransome ¾ yd. with engine and hopper; Foote Continuous No. 2½, 7½ H.P. motor, D.C. on wheels.—MARINE.

Portable plant, complete capacity 300-600 yds. per day; rare bargain.—LINES FLYNN.

1 cu.yd. Smith with engine on skids.—BECKWITH.

1 Eureka continuous 3 H.P. D.C. motor; 2 Austin cubes with engines and boilers on steel skids; 2—2½ Smiths with engines on wheels; 1 yd. and ½ yd. Ransomes on skids.—PIPE.

1 Foote No. 3 continuous mixer.—JENNISON.

2 Foote continuous mixers.—AMERICAN.

PILING, SHEET STEEL

165 pcs. Lackawanna 14" arch web, 22 and 24 ft. lengths, used once, excellent condition.—37 Dun Bldg., Buffalo, N. Y.

5000 pcs. Lackawanna and Carnegie. What are your needs?—GRIMSHAW.

PIPE

Wrought with new threads and couplings, all sizes.—PIPE.

300,000 rethreaded wrought, sizes ¾" to 24".—MARINE.

PUMPS

1 Cameron 3½x2x4 Steam pump.—SAMPSON.

Piston and plunger, sizes up to 12x12x12.—NEW RIVER.

1 Compound duplex vertical center packed plunger, circulating pump, size 21—34x19—24, capacity 3500 gallons, 24 hours.—HITNER'S.

2 Emerson steam pumps No. 4; 1 Cameron 10x10½x20 and other sizes.—PIPE.

RAILS

40 ton of 35 lb. with fish plates.—PIPE.

20,000 ft. 24" gauge 20 lb. portable track.—SCHMIDT.

ROAD ROLLERS

2—10 ton Buffalo Pitts, practically new.—GIVIN.

1—8 ton Iroquois, used two months.—GIVIN.

2—5 ton Iroquois, perfect condition.—GIVIN.

1—5 ton Kelley tandem and 1—7 ton Chicago tandem, both rollers have been used but upon two jobs and are in most excellent condition.—Address the AMERICAN NATIONAL BANK, Findlay, Ohio.

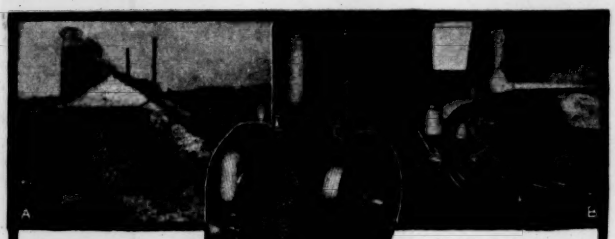
1 Case 10 ton 3 wheel roller and 1 Buffalo-Pitts 10 ton 3 wheel.—JENNISON.

Tandem for paving, condition fine.—F. S. 167, Eng. News.

1—8 ton Austin gasoline, perfect condition, rare bargain. —B. G. COON CONSTRUCTION CO., 274 Union St., Luzerne, Pa.

SEWER PLANTS

2—Complete Sewer Contractor's Plants, including compressors and locks.—LINES FLYNN.



"A"—The small building in the lower left hand corner is where the Novo Type "U" Pumping Outfit is located. It is drawing water from the quarry pit and is forcing it up over the bank and 2¾ miles down the road.

"B"—Shows the No. 68 Type "U" Pumping Outfit in operation. This photograph was taken from the door of the small building shown in photograph "A."

Stop Hauling Water!

New York State Uses Novo

Mr. Barber, Supt. of State work in New York, finds that the Novo Type "U" Pumping Outfit is the one outfit that can be depended on for long distance high pressure pumping demanded on State Road work. This is the pump that was used on one of the model roads the State built at Clarence, New York. He says:

"I received the pictures of the Novo Pumping Outfit and think they are fine, and I am thanking you for same.
"This Novo Pumping Outfit is forcing water about two and one-half miles and supplying both of our big Koehring Mixers.
"I hope this will help you in making sales of Novo Pumping Outfits. I think they are the best I ever saw."

Contractors have long felt an urgent need for a good reliable pump that would stand the unusual strain of long distance high pressure pumping and at the same time be light enough to be easily portable. For the first time this need is fully supplied in the

Novo Type "U" Pumping Outfit

This outfit exactly fills the requirements for such work as road construction where water many times must be forced two or three miles—for concrete mixers in side-walk construction—for well drilling and boiler supply in oil fields—for factory water supply. It does the work as well as a Triplex pump and costs half as much.

For lower pressure, shorter distance pumping we have two outfits—Fig. 1401 and the Novo Medium Pressure Pumping Outfit—which are especially well adapted.

No licensed engineer or fireman is required to run the NOVO—there is no coal to be moved or stolen. You can probably save enough on your present methods to pay for the NOVO during the first few months of its use.

The Reliable Novo Engine which operates the Type "U" Pump runs on kerosene, alcohol or distillate. The pumping outfit is furnished either truck or skid mounted.

Why not take the time *right now* to ask us how the Novo Type "U" will save you money on your present methods? We will gladly tell you if you will write us fully. Do it now while the matter is before you.

NOVO REG. U.S. PAT. OFF. ENGINES AND OUTFITS

NOVO ENGINE CO., 367 Willow St., Lansing, Mich.
or Station A, San Jose, Cal.

CLARENCE E. BEMENT,
Secretary and Manager

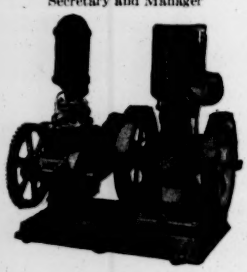


Fig. 1401
Novo Pyramid Pumping Outfit.

Fig. 182
Novo Medium Pressure Pumping Outfit.

STEAM SHOVELS

Marion, model 60, steam shovel.—SOUTHERN.

1 ¾-yd. revolving traction, rebuilt.—LINES FLYNN.

1 70-ton Bucyrus, 2½ yd. dipper; Thew "O."—BRADEN.

2—65 ton, Bucyrus, 2½ Yd. dippers, $3000 each.—HITNER'S.

50 steam shovels, all makes and sizes; some used only two months; rent or sale. Rare bargains. Everything sold is guaranteed.—CONTRACTORS S. CO.

Thew "O" traction, high number, Mass. boiler.—DALLETT.

1 Model 0 Thew, built 1912, low price.—GIVIN.

1—14B Bucyrus traction revolving ⅝ yd.—GIVIN.

⅝ yd. Thew, $2250; ⅝ yd. Bucyrus 14 B, $2500. Both traction and good.—GRIMSHAW.

Thew No. 2—Railroad trucks, unusual bargain.—KEW GARDENS CORPORATION, 56 Wall St., New York, N. Y.

TRACTION ENGINES

1 Buffalo-Pitts., 22 H.P., and 1 Huber, 16 H.P.—AMERICAN.

TRACTION HAULAGE OUTFIT

One 30-60 HP. Pioneer tractor and six 6-yd. steel dump wagons; in first-class condition. Will sacrifice for quick sale. Address 617 Chronicle Bldg., Houston, Texas.

TRAVELING CRANES

1 15-ton electric 36' 6" span.—DOUGLAS.

One—with clam shell bucket, new and cheap.—WHITNEY.

TRENCHING MACHINES

One No. 1 Austin, good shape and a bargain. BOYD & COOK, 1018 Reibold Bldg., Dayton, Ohio.

WAGONS

4 Buffalo-Pitts., 10 cu.yds. cap. each.—AMERICAN.

Wanted

1—10 ton macadam roller. Send information to W. 168, Eng. News.

2000 lb. tensile testing machine for cement briquettes. Give lowest cash price with full descriptions.—PHILADELPHIA QUARTZ CO., Chester, Pa.

2500 tons or more 70 lb. relayers; describe fully; name best price and terms. W. 196, Eng. News.

For use in Lake Ontario, near Toronto, boat that can be used or converted into House Boat or Mess Boat for Dredge Crews. Give full description of boat, age, location, condition and price.—CANADIAN STEWART CO., LTD., 30 Church St., New York, N. Y.

FOR SALE

Air Compressors	Electric Locomotives	Pipe
Blowers and Fans	Elevators	Pumps
Boilers	Elevator Engines	Oil Separators
Buckets	Engines	Rails
Cars	Feed Water Heaters	Steel Pontoon
Derricks	Generators	Turn Tables
Drills	Grout Machines	Valves and Fittings
	Machine Tools	

Harold Carpenter, Resident Engineer, Astoria Light, Heat & Power Co., East 132nd St. and Locust Ave., New York City.

Plant and Equipment for Sale

Including locomotives, gondolas, derricks, concrete mixers, rock drills, buckets, pumps, engines, elevators and conveyors. *Ask for new list with revised prices.*

ALABAMA POWER COMPANY,
Birmingham, Ala.

Hydraulic Dredge and Other Machinery For Sale

One—20" Hydraulic dredge, complete with Pontoons, Pipe Line, etc.
One—1¼ - yard Vulcan Steam Shovel.
One—No. 3½ Keystone Well Drilling Machine.

For Further Information
Address P. O. Box 27, Rochester, N. Y.

ERIE Type B—3/4 yd. Revolving SHOVEL
Built by

BALL ENGINE COMPANY, ERIE, PA. **Write for Bulletin S-10**